Effective masses of holes in...

S/181/63/005/001/054/064 B104/B186

are obtained for the cyclotron parameters. The values of A, B, and N $\,$ measured for Ge satisfy these conditions at B < O and N < O. The values of the cyclotron parameters measured for non-deformed Si crystals (G. Dresselhaus et al., Phys. Rev., 98, 368, 1955; R. N. Dexter et al., J. Phys. Chem. Sol., 20, 281, 1961) fulfill the conditions at N<O whichever the sign of B. Results obtained for deformed Si crystals do not fulfill the conditions. This is explained by a change in cyclotron parameters on

ASSOCIATION: Gosudarstvennyy opticheskiy institut im. S. I. Vavilova, Leningrad (State Optical Institute imeni S. I. Vavilov, Leningrad)

SUBMITTED:

September 14, 1962

Card 3/3

B/181/63/005/001/055/064 B104/B186

AUTHOR:

Shtivel'man, K. Ya.

TITLE:

Effect of non-parabolic bands on the hole mobility in

germanium and silicon

PERIODICAL:

Fizika tverdogo tela, v. 5, no. 1, 1963, 350-352

TEXT: The role played by non-parabolic valence bands in hole mobility was studied to explain why the hole mobility in Ge and Si at room temperature is inversely proportional to T2.3 (T is the absolute temperature). The assumption that an increase in hole mass with increasing energy (temperature) causes a decrease in hole mobility is based on a simple theory in which only carrier scattering by long-wave acoustic lattice vibrations is considered. In germanium this decrease in hole mobility can be neglected, not so in silicon. If the effective mass m in the relation $\frac{1}{\mu} \sim m^{5/2}T^{3/2}$ (1) is replaced by the averaged mass $\overline{m}(\xi) = \overline{m}(\Lambda)(\xi/\Lambda)^{0.3}$, then (1) agrees approximately with the relation $1/\mu \sim T^{2.3}$ determined experimentally. Λ is the spin-orbit splitting of the bands. Better agreement is reached in the Card 1/2

Effect of non-parabolic bands...

S/181/63/005/001/055/064 B104/B186

case of non-parabolic bands by taking the changes of other parameters into consideration (effective mass of state densities, etc.).

SUBMITTED:

September 17, 1962

Card 2/2

L 30094-66 = EWT(1)/EWT(m)/EWP(t)/ETI = IJP(c) = AT/JD
ACC NR: AP6012495 SOURCE CODE: UR/0181/66/008/004/1262/1263
AUTHORS: Baryshev, N. S.; Shtivel'man, K. Ya.
ORG: none
TITLE: Mobility of electrons in p-InSb
SOURCE: Fizika tverdogo tela, v. 8, no. 4, 1966, 1262-1263
TOPIC TAGS: indium compound, antimonide, electron mobility, photomagnetic effect, carrier density, hole mobility, phonon drag
ABSTRACT: The authors investigated the dragging of minority carriers in crystals by the majority carriers in p-InSb. The mobility of the electrons was determined by the photomagnetic effect using several samples, of which two were pure enough for the theory of the dragging effect to
be applicable (7×10^{13}) and 1.2×10^{14} cm ⁻³ hole density at liquid- nitrogen temperature). The measured electron mobilities in these samples
were 2.7×10^5 and 1.9×10^5 cm ² /v-sec at 100K, and since the compensation of the acceptors was negligible in these samples the hole mobility was high. A theoretical estimate of the mobility of the electrons with allowance for their scattering by phonons, by ionized acceptors, and by
holes yields in this case values which are approximately twice the experi-
Card 1/2

mental values. The authors show by means of rough estimates that this discrepancy can be attributed to dragging, which increases by three orders of magnitude the contribution made to the scattering of electrons by light holes. Although more accurate calculations are needed for a reliable determination of the law of dragging of electrons by holes, it is concluded that the dragging effect is quite strong and that the effective mass of the light holes amounts to approximately 0.015m ₀ . The authors thank I. M. Dykman, N. N. Grigoriyev, and A. G. Samoylovich for a useful discussion. SUB CODE: 20/ SUBM DATE: 27Sep65/ ORIG REF: 003/ OTH REF: 005
orders of magnitude the contribution made to the scattering of electrons by light holes. Although more accurate calculations are needed for a reliable determination of the law of dragging of electrons by holes, it is concluded that the dragging effect is quite strong and that the effective mass of the light holes amounts to approximately 0.015m ₀ . The authors thank I. M. Dykman, N. N. Grigoriyev, and A. G. Samoylovich for a useful discussion.
a useful discussion.
SUB CODE: 20/ SUBM DATE: 27Sep65/ ORIG REF: 003/ OTH REF: 005
Card 2/2 (1.6)

Some problems in the formation of inhibition in young children. Naukapp. Neuk.-dosl. inst. psykhol. 11:229-230 '59. (MIRA 13:11)

l. Institut psikhologii, Kiyev. (Inhibition)

KAMENEV, Nikolay Nikolayevich, inzh.; BYZEYEVA, L.A. [translator]; MERLIS, V.M. [translator]; SHTIVEL MAN, H. M. [translator]; SAZONOV, A.G., inzh., red.; MEDVEDEVA, M.A., tekhn.red.

LESS CONTROLLES DE LA MANTE DE LA CONTROL DEL CONTROL DEL CONTROL DEL CONTROL DE LA CONTROL DEL CONTROL DEL CONTROL DEL CONTROL DE LA CONTROL DEL CONTROL DE LA CONTROL DEL CONTROL DE LA CONTROL DE LA CONTROL DEL CONTROL DE LA CONTROL DEL CONTROL DEL CONTROL DE LA CONTROL DE LA CONTROL DEL CONTROL DEL CONTROL DE LA CONTROL DE LA CONTROL DEL CONTROL DE LA CONTROL DE

[Converting steam locomotive depots into depots for diesel locomotives; translated articles] Pereustroistvo perovosnykh depo v teplovoznye; sbornik perevodnykh statei. Sost. N.N. Kamenev. Moskva. Vses.izdatel sko-poligr.ob edinenie M-va putei soobshcheniia, 1960. 174 p. (MIRA 14:4)

(Railroads--Roundhouses)

BALASHEV, P., inzh.; SIMONOVA, R., inzh.; SHTIVEL'MAN, Ya., inzh.

"Finish of knitted fabrics" by S.A. Abranov. Beviewed by P. Balashev,

"Finish of knitted fabrics" by S.A. Abranov. Beviewed by P. Balashev,

R. Simonova, IA. Shtivel'man. Leg. pron. 18 no.4:51-52 Ap '58.

(MIRA 11:4)

1. Leningradskaya fabrika "Krasnoye znamya" (for Balashev). 2. Chernovitskiy chulochnyy kombinat (for Simonova, Shtivel'man).

(Knit goods) (Abramov, S.A.)

SHTIVEL'MAN, Ya.Kh., inzh.

Dyeing of nitron yarn. Tekst.prom. 20 no.1:74 Ja '60.

(MIRA 13:5)

(Dyos and dyeing--Textile fibers, Synthetic)

SHTIVEL'MAN, Ya.Kh., inzh.

Application of ultrasonic waves in knit goods manufacturing. Tekst. prom. 20 no.3:71-72 Mr '60. (MIRA 14:5)

(Ultrasonic waves—Industrial applications)

(Dyes and dyeing—Knit goods)

BIDASYUK, A.G. [Bidasiuk, A.H.]; SHTIVEL'MAN, Ya.Kh.

Experience in the application of ultrasonic waves in the Chernovtsy Hosiery Combine. Leh.prom. no.1:23-26 Ja-Mr '62. (MIRA 15:9)

(Chernovtsy-Hosiery industry)
(Ultrasonic waves-Industrial applications)

SHTIVEL'MAN, Ya.Kh.

Reasons for the dispersion of direct dyes. Part 2. Tekst. prom. 22 no.7:46-47 Jl 162. (MIRA 17:1)

1. Nachal'nik khimicheskoy laboratorii Chernovitskogo chulochnogo kombinata.

SHTIVEL MAN, Ya. Kh.

Improving the quality of nylon hosiery. Tekst. prom. 23 no.3: 54 Mr 163. (MIRA 16:4)

1. Nachal'nik khimicheskoy laboratorii Chernovitskogo chulochnogo kombinata.

(Chernovitsy-Hosiery, Nylon)

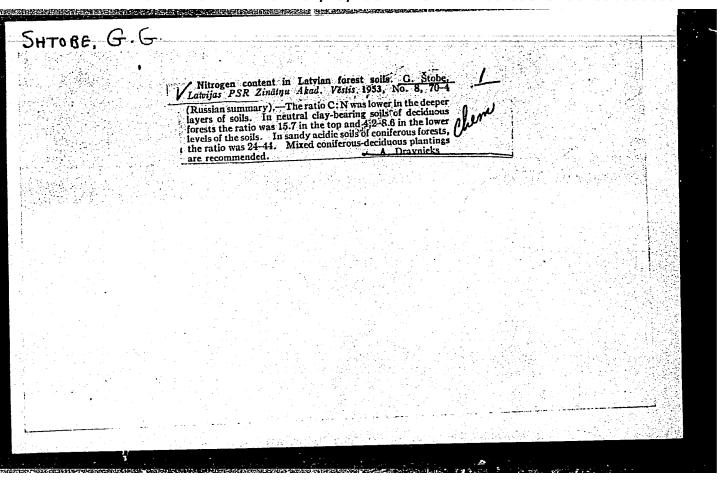
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SHTOBEE, V.A., inzh.; TROYANOVSKIY, Yu.V., inzh.

Using the RMTs-2 machine with two cutting units for loosening frozen ground. Mekh. stroi. 19 no.9:17 S '62. (MIRA 15:9) (Frozen ground) (Earthwork)

SITORE, C. G. Sredniy chisla aktual' noy kontsentratsii lonov vederoda.

| Townstiya Aral. nauk-latv. 532, 1979, No. 7, S. 93-96. -- Na latysh.
| yaz. -- Rezjare na rus. yaz.
| SO: Letopis, No. 32, 1949.



SHTOBE, G. G.

SHTOBE, G. G. — "Content of Nutritive Substances in Forest Soils of the Latvian SSR." Latvian Agricultural Adacemy, 1953. In Latvian (Dissertation for the Degree of Candidate of Agricultural Sciences)

SO: Izvestiya Ak. Nauk Latvivskov SSR, No. 9, Sept., 1955

COL PROPERTIES DIVINO DE DESCRIPCIONES DE LA COMPANSION DE CONTRA DE CONTRA

PHASE I BOOK EXPLOITATION

SOV/5958

Shtoda, Andrey Vladimirovich, Docent, Candidate of Technical Sciences,
Stepan Pavlovich Aleshchenko, Aleksandr Yakovlevich Ivanov, Vsevolod
Semenovich Krasavtsev, Fedor Nikolayevich Morozov, Viktor Anatol yevich
Sekistov, and Aleksandr Georgiyevich Shiukov

Konstruktsiya aviatsionnykh gazoturbinnykh dvigateley (Construction of Aircraft Gas-Turbine Engines) Moscow, Voyenizdat M-va obor. SSSR, 1961. 411 p. Errata slip inserted. No. of copies printed not given.

Ed.: D. A. Novak; Tech. Ed.: R. L. Solomonik.

PURPOSE: This textbook is intended for the engineering, technical, and flying personnel of the Soviet Air Force, Civil Air Fleet, and All-Union Voluntary Society for the Promotion of the Army, Aviation, and Navy. It may also be useful to students at aeronautical schools.

COVERAGE: General information on the construction of Soviet and non-Soviet aircraft gas-turbine engines is presented. Soviet engines considered are the

Card 1/2

Construction of Aircraft (Cont.)

SOV/5958

RD-10, RD-20, RD-500, RD-45, VK-1, AI-20, AM-3, and AM-5. The book was written as follows: Foreword, by A.V. Shtoda; Chs. I and VII, by A. G. Shiukov and V. S. Krasavtsev; Ch. II, by V. A. Sekistov; Ch. III, by S. P. Aleshchen k o; Chs. IV and V, by F. N. Morozov; Ch. VI, by V. S. Krasavtsev; Ch. VIII, by A. V. Shtoda, V. A. Sekistov, and A. G. Shiukov; and Ch. IX, by A. Ya. Ivanov, all Docents and Candidates of Technical Sciences. The authors thank I. T. Denisov for his assistance. There are 44 references: 23 Soviet (including 2 translations), 17 English, 1 French, 1 German, and 2 unidentified.

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Axial-flow compressors
 Centrifugal compressors

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SKUBACHEVSKIY, Gleb Semenovich; TUMANSKIY, S.K., doktor tekhn.
nauk, retsenzent; ZHIRITSKIY, G.S., doktor tekhn. nauk
prof., retsenzent; STRUNKIN, V.A., kand. tekhn. nauk
dots., retsenzent; SHTODA, A.V., prof., nauchn. red.;
FOFOV, A.V., red.

[Aircraft gas turbine engines; design and construction of parts] Aviatsionnye gazoturbinnye dvigateli; konstruktsiia i raschet detalei. Izd.2., perer. i dop. Moskva, Mashinostroenie, 1965. 451 p. (MIRA 19:1)

1. Chien-korrespondent AN SCOR (for Tumanskiy).

SHTODA, A., inzh.-polkovnik, dotsent, kand.tekhn.nauk

Automatic control of turbojet engines. Regulation of fuel supply.

(MIRA 16:8)

Av.1 kosm. 46 no.6:75-82 Je '63.

(Airplanes—Turbojet engines)

DOLGILEVICH, M.I.; SHTODA, G.A.

Humus composition in some soils of the Transcarrathian piedmont. Nauch. dokl. vys. shkoly; biol. nauki no.1:212-216 [66. (MIRA 19:1)

1. Rekomendovana kafedroy rochvovedeniya i zemledeliya Ukrainskogo instituta inzhenerov vodnogo khozyaystva. Submitted June 16, 1964.

PLAKSIN, Yakov Grigor'yevich; FLEKKEL' Arkadiy Il'ich; NIKITENKO,
Vasiliy Rodionovich; NOVIKOV, Grigoriy Porfir'yevich;
SHTODA, Ivan Ivanovich: MARKOVICH, M.P., kand.tekhn.nauk, dots.,
retient; GRIGOR, V.I., dots., retsenzent; MITROKHIN, S.G., retsenzent; SLAVIN, D.S., otv.red.; CHERNEGOVA, E.N., red.izd-va;
MAKSIMOVA; V.V., tekhn.red.

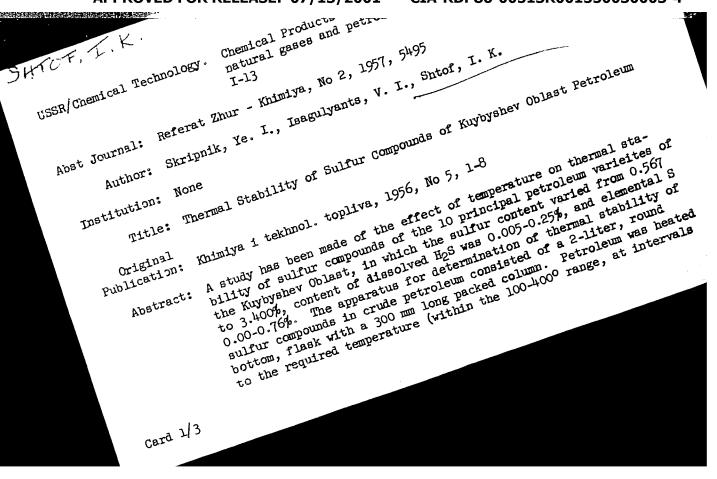
[Principles of building and mining-engineering structures]
Osnovy stroitel'nogo dela i gornoinzhenernye sooruzheniia.
Osnovy stroitel'nogo dela i gornoinzhenernye sooruzheniia.
Izd.2., dop. i perer. [By] IA.G. Plaksin i dr. Moskva,
Gosgortekhizdat, 1963. 463 p.

(Building) (Mine buildings)

HTODA, S. urcvoy agregat ITV-150 (Dr L. P. Shtoda, G. A. Chechul Lt head of title: Russia.	F. Filling unit, ZIV-15 In. Moskva, Gösge Ministerstva Geolo	50) opisaniye Bolizdat 1952. Ogii.	i rukovodstvo po lle p. diagra., t	eksploatatsii. tables.	
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ODINTSOV, Georgiy Nikolayevich; SHTODA, Sergey Pavlovich; LYUBARSKIY, Aleksey
Leonidovich; BUBNOV, Ye.S., red.; BOROVLKV, V.A., red., SERGEYEVA, N.A.,
red.izdatel'stva; PEN'KOVA, S.A., tekhn.red.

[The SBU-150-ZIV mobile boring apparatus; description of and directions for operation] Samokhodnaia burovaia ustanovka SBU-150-ZIV; opisanie i rukovodstvo po kspluatatsii. Moskva, Gos.nauchno-tekhn. ozd-vo lit-ry po geol. i okhrane nedr, 1957. 95 p.(MIRA 10:12) (Boring machinery)



UBSR/Chemical Technology Chemical Products and Their Application -- Treatment of natural gases and petroleum. Motor fuels. Lubricants, I-13

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5495

Abstract: of 50°) and was held at this temperature for 30 minutes. For each temperature a determination was made, of the amount of E2S formed, of low boiling mercaptanes and of the amount of S in distillate and residue. It is shown that in all petroleum varieties of Kuybyshev Oblast H2S is found in dissolved state, but in the petroleum distillation processes the principal effect is produced by H2S of secondary origin. All the investigated varieties of petroleum are characterized by a relatively high thermal stability of sulfur compounds in the temperature range up to 1500. Petroleum varieties of Upper Devonian are characterized by a high thermal stability of sulfur compounds up to 350°. Further increase of the temperature increases the formation of H2S by several times, therefore on distillation of petroleum of the Kuybyshev Oblast the maximum permissible temperature at the exit from the atmospheric portion of the furnace must be considered to be 350°. Petroleum varieties of the carboniferous series are characterized by the formation of considerable amounts of H2S already at 190-2100. The different behavior of sulfur compounds of

Card 2/3

USSR/Chemical Technology. Chemical Products and Their Application -- Treatment of

natural gases and petroleum. Motor fuels. Lubricants,

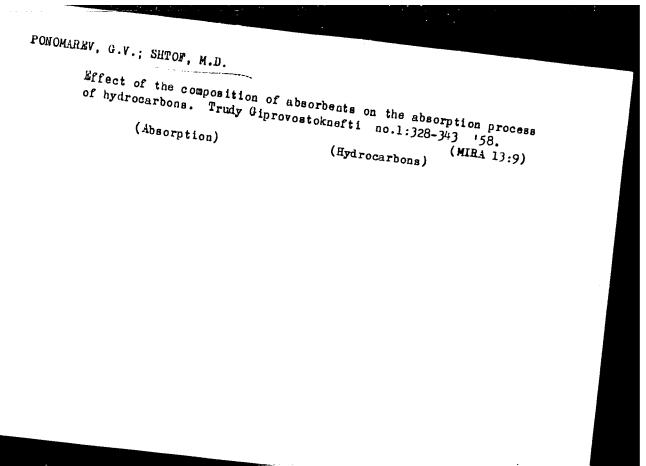
I-13

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5495

Abstract: petroleum varieties of Devonian and carboniferous series indicates

the necessity of a separate sorting of these petroleum varieties and to process them according to different technological procedures.

Card 3/3



SHTOF, M.D.; DROGIN, I.N.

Creating underground storage in exhausted gas pools containing hydrogen sulfide. Gas. prom. 6 no.3:38-41 '61. (MIRA 14:3) (Gas, Natural—Storage)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001550030003-4"

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KOSHKIN, Viktor Gavrilovich, kand. tekhn. nauk. ERENBURG,
Aleksandr Isaakovich; DANTSIN, Matvey Isaakovich, inzh.
SHTOFENMAKHER. Berta Moiseyevna, inzh.; ZOKHIN, Grigoriy

[Polyvinyl chloride lineleum on a felt base used for heat and sound insulation; practices of the Mytishchi Combine for Synthetic Building Materials and Products]
Polivinilkhlorldnyi lineleum na teplo- i zvukoizoliatsion- noi voilochnoi osnove; opyt Mytishchinskogo kombinata sinteticheskikh stroitelinykh materialov i izdelii. Moskva, Stroitzdat, 1964. lo p. (MIRA 18:5)

1. Zamestitel' direktora Vsesoyuznogo nauchno-issledovatel'skogo instituta novykh stroitel'nykh materialov (for
Koshkin). 2. Glavnyy inzhener laboratorii Vsesoyuznogo
nauchno-issledovatel'skogo instituta novykh stroitel'nykh
materialov (for Erenburg). 3. Rukovoditel' laboratorii
Nauchno-issledovatel'skogo instituta zhelezobetomykh izdeliy, stroitel'nykh i nerudnykh materialov Glavnogo upravleniya promyshlennosti stroitel'nykh materialov i stroitel'nykh detaley (for Dantsin). 4. Glavny, tekhnolog laboratorii
Nauchno-issledovatel'skogo instituta zhelezobetomykh izdeliy, stroitel'nykh i nerudnykh materialov Glavnogo upravleniya promyshlennosti stroitel'nykh materialov i stroitel'wykh detaley (for Shtofenmakher). 5. Direktor Mytishchinskogo kombinata sinteticheskikh stroitel'nykh materialov i izdeliy(for Zokhin).

SHAPIRO, A.D., SHTOFENMAKHER, N.A.

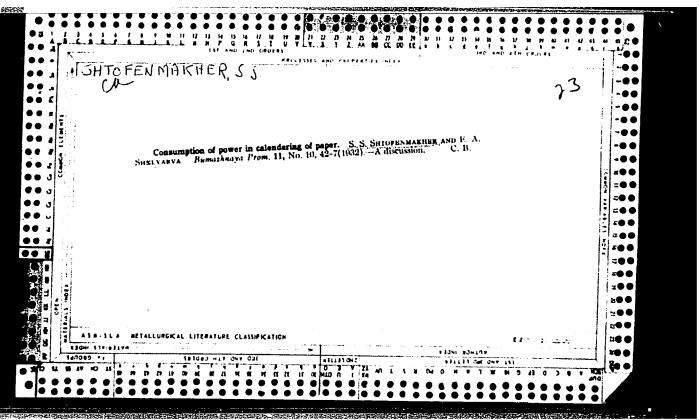
Determining the properties of liner board. Bum.prom. 35 no.8:19

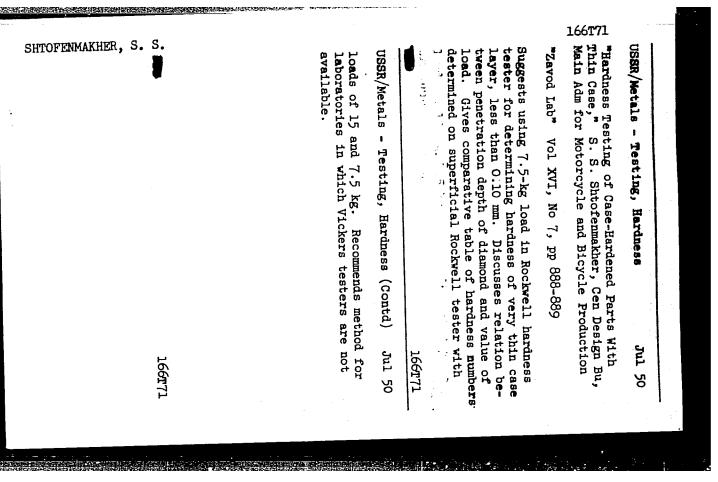
(MIRA 13:8)

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(Paperboard)

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KOVSH, O.; KOPTELOVA, M.; SMYAKSTE, I.; SHTOFER, G.

Practice in clinical application of the anticoagulant "cmefin" of the indandione group. Izv. AN Latv. SSR mc.10:129-132 '62. (MIRA 16:1)

1. Institut organicheskogo sinteza AN Latviyskoy SSR.

(ANTICOAGULANTS (MEDICINE)) (INDANDIONE)

SVIDERSKIY, V.I., doktor fil. nauk; SHTOFF, V.A., kand. fil. nauk; IZMAYLOV, S.V., kand. fiz. mat. nauk; BRANSKIY, V.P., kand. fil. nauk; MOSTEPANENKO, M.V., kand. fil. nauk; MELYUKHIN, S.T., kand. fil. nauk; MIKHLIN, Ye.I., red.; YELIZAROVA, N.A., tekhn. red.

[Philosophical problems in the present-day theory of motion in nature]Filosofskie voprosy sovremennogo ucheniia o dvi-zhenii v prirode. Leningrad, 1962. 198 p. (MIRA 15:10)

1. Leningrad, Universitet.
(Science--Philosophy) (Motion)

SHTOGRIN, O.D. [Shtohryn, O.D.]

Drainage network of the cis-Carpathian region during the Pre-Quaternary period. Geog. zbir. no.6:38-42 '62. (MIRA 15:9) (Carpathian Mountain region--Hydrology)

SHTOGRIN, Ol'ga Dmitriyevna[Shtohryn, O.D.]; GAVRILENKO, K.S.

[Havrylenko, K.S.], retsenzent; ROMANYUK, A.F., retsenzent;

PORFIR'YEV, V.B., akademik. nauchnyy red.; SERDYUK, O.P.,

red.; LISOVETS', O.M. [Lysovets', O.M.], tekhn. red.

[Underground waters of Quaternary sediments in the cis-Carpathian region] Pidzemni vody chetvertynnykh vidkladiv Peredkarpattia. Kyiv, Vyd-vo AN URSR, 1963. 137 p. (MIRA 16:12)

1. Akademiya nauk Ukr.SSR (for Porfir'yev). (Carpathian Mountain region—Water, Underground)

SLIVKA, R.O. [Slyvka, R.O.]; GRITSENKO, M.M. [Hrytsenko, M.M.]; SHTOGRIN, S.I. [Shtohryn, S.I.]

Geomorphology and melioration problems of the Dnieper-Pripet interfluve. Dop. ta pov. Liviv. un. no.7 pt.3: 27-30 157.

(MIRA 11:2)

(Dnieper Lowland -- Physical geography)

SHTOGRIN, Ye.D. [Shtohryn, O.D.]

Quaternary glaciation in the cis-Carpathian region and on the northern slope of the eastern Carpathians. Geog. zbir.

no.4:185-189 '61. (MIRA 14:8) (Carpathian Mountain region—Glacial spoch)

YEY, B.N., starshiy nauchnyy sotrudnik; AGADZHANOV, R.A., mladshiy nauchnyy sotrudnik; ALAKHVERDYANTS, S.A., mladshiy nauchnyy sotrudnik; DASHKOVA, Ye.M., mladshiy nauchnyy sotrudnik; MAYOROVA, L.A., mladshiy nauchnyy sotrudnik; SHTOK, E.Sh., mladshiy nauchnyy sotrudnik

Experience in the sanitary and hygienic evaluation of agricultural sweage farms in Ashkhabad. Gig. i san. 25 no. 12:18-20 D '60.

(MIRA 14:2)

1. Iz Ashkhabadskogo instituta epidemiologii i gigiyeny. (SOIL MICRO-ORGANISMS) (SEWAGE IRRIGATION)

FEL'DMAN, I.Kh.; Prinimali uchastiye: ZORINA, L.M., studentka; SHTOK, E.Sh., student; STEPANOVA, R.I., studentka

Amino sulfides and amino sulfones. Part 22: Reaction of sulfonomethylation of amino acids. Zhur.ob.khim. 32 no.4:1043-1046 Ap '62. (MIRA 15:4)

1. Leningradskiy khimiko-farmatsevticheskiy institut.
(Amino acids) (Sulfones)

SHTOK, V.N.

Polyneurites in chronic arsenic poisoning. Sov. med. 24 no. 10:104-110 0 '60. (MIRA 13:12)

l. Iz otdeleniya nervnykh bolezney (zav. S.A. Kogan, nauchnyy rukovoditel' raboty - prof. Kafedry nervnykh bolezney TSentral'nogo instituta usovershenstvovaniya vrachey M.B. TSuker) Moskovskoy
gorodskoy klinicheskoy ordena Lenina bol'nitsy imeni S.P. Botkina
(glavnyy vrach - prof. A.N. Shabanov).

(NEURITIS) (ARSENIC—TOXICOLOGY)

Dehydrating action of urea. Vop.neirokhir. no.2:43-48 162.

(MIPA 15:3)

(UREA) (BODY FLUIDS—PRESSURE)

SHTOK, V.N. (Moskva)

Stenosis and thrombosis of the extracranial large vessels of the head. Min.med. no.9:17-23 *62. (MIRA 15:12)

1. Iz nevrologicheskogo otdeleniya Moskovskoy klinicheskoy ordena Lenina bol'nitsy imeni S.P. Botkina (glavnyy vrach - dotsent Yu.G. Antonov).

(THROMBOSIS) (HEAD-BLOOD SUPPLY)

STOK, V.N. [Shtok, V.N.] (Moskva)

Stenosis and thrombosis of the major extremanial blood vessels of the head. Cas. lek. cesk. 102 no.42:193-197 18 0 '63.

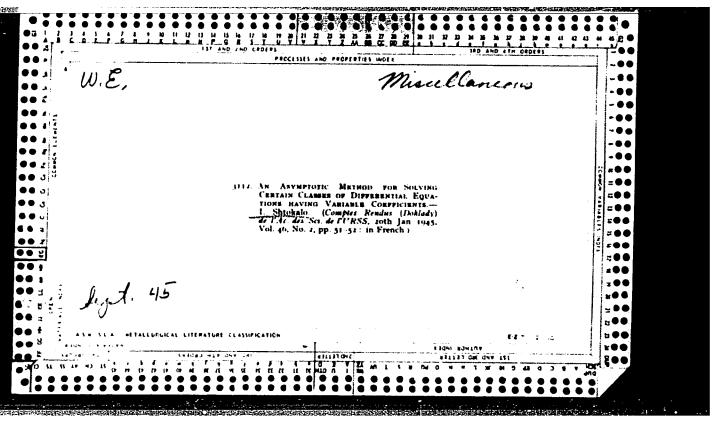
SHTOK, V.N.

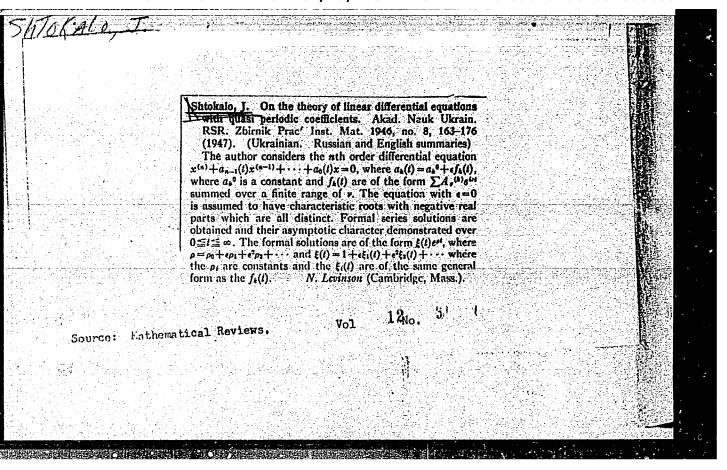
"Cerebral infarction: the role of stenosis of the extracranial cerebral arteries" by P.O. Yates, E. Hutchinson. Reviewed by V.N. Shtok. Zhur. nevr. i psikh. 64 no.2:309-310 164. (MIRA 17:5)

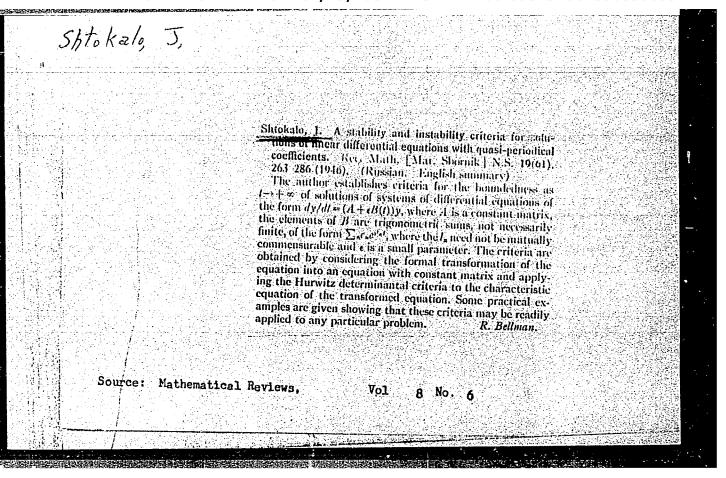
KANDEL', E.I.; SHTOK, V.N.

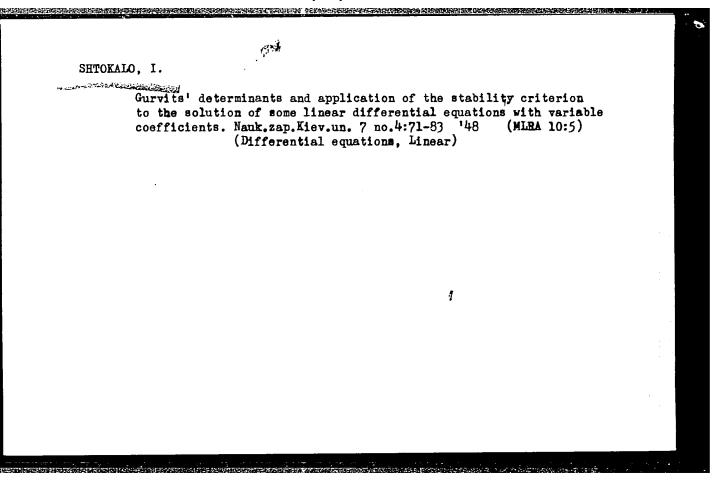
International Symposium on Stereotaxic Neurosurgery. Vop. neirokhin, 28 no.1:61-62 Ja-F '64. (MIRA 18:1)

Dehydrating effect of mannitol. Vop. neirokhir. 28 no.6:48-50
N-D '64.









SHTOKALO, T.

Linear differential equations with quasi-periodic coefficients.

Linear differential equations '48 (MLRA 10:5)

Nauk.zap.Kiev.un. 7 no.4:85-100 '48

(Differential equations, Linear)

SHTOKALO, I.Z.

Theory of the generalized symbolic image for solutions of linear differential equations with quasi-periodic coefficients. Zbir.prats' Inst.mat.AN URSR no.11:43-59 '48. (MLRA 9:9) (Differential equations, Linear)

SHTOKALO, I.Z.

Generalization of the basic formula for the symbolic method. Ukr. mat.zhur. [1] no.3:51-59 '49. (MLRA 7:10) (Differential equations, Linear)

SHTOKALO, I.Z.

Generalization studies in the generalized theory of partial

在公式的形式的形式的形式的形式的现在分词 <u>1988年1988年1988年1988年1988年1988年1988年19</u>

differential equations. Scientific works, pedagogical activities, and biography of IU.V.Pfeiffer, 1872-1946. Nauk.sap.Kiev.un.8 no.4:19-24 149. (MLRA 9:10)

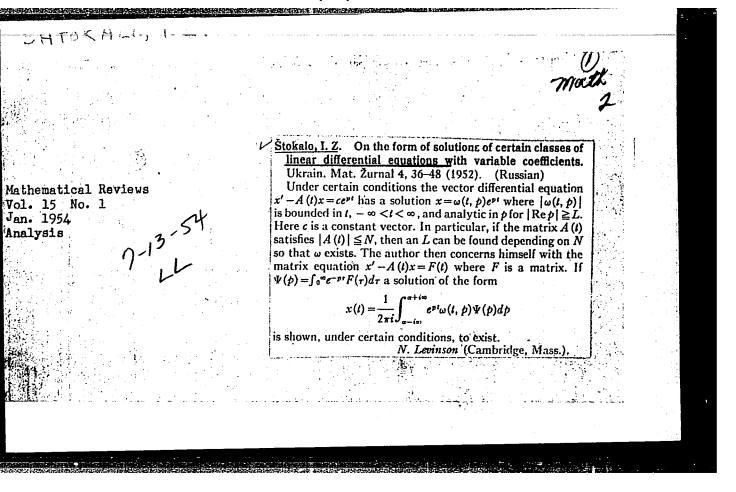
(Differential equations, Partial)(Pfeiffer, IUrii Vasyl'ovych, 1872-1946)

RUTYTS'KYY, Ya.B.; SHTOKALO, Y.Z., diysnyy chlen.

On one non-linear operator acting in Orlich spaces. Dop.AN URSR no.3:161-166 (MIRA 6:9)

1. Akademiya nauk Ukrayins'koyi RSR (for Shtokalo). 2. Kyyivs'kyy derzhavnyy universytet im. T.H.Shevchenka (for Rutyts'kyy). (Spaces, Generalized)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001550030003-4"



SHTOKALO, I.Z.

Mykola Mykelaievych Boholiubev. Nauk.zap.Kiev.un.ll ne.7:117-127 '52. (MLRA 9:10)
(Boholiubev, Mykela Mykelaiovych, 1909-)(Bibliegraphy--Matematics)

SHTOKALO, Y.Z.; IVASYUTA, M.K.

Scientific work of institutes of the Iwov branch of the Academy of Sciences of the Ukrainian S.S.R. in 1954. Visnyk AN URSR 26 no.7: 16-25 J1'55. (MIRA 8:10) (Academy of sciences of the Ukrainian S.S.R.)

SHTOKALO, I.Z

Achievements in the field of mathematics at Kiev University during the Soviet period. Nauk. zap. Kyiv. un. 16 no.16:5-28 (MIRA 13:3)

(Kiev--Mathematics--Study and teaching)

SHTOKALO, Iosif Zakharovich: POGREBISSKIY, I.B. [Pogrebis'kyi, I.B.], red.; REMENNIK, T.K., red.izd-va; MIL'OKHIN, I.D., tekha.red.

[Outline of the development of mathematics in the Ukraine during the 40 years of the Soviet regime] Narys rozvytku matematyky na Ukraini za 40 rokiv Radians'koi vlady. Kyiv, Vyd-vo Akad.nauk URSR, 1958. 81 p. (MIRA 11:12)

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OSTROGRADSKIY, Mikhail Vasil'yevich [deceased]; SHTOKALO, I.Z., akademik, otv. red.; BOGOLYUBOV, N.N., akademik, otv. red. toma; GNEDENKO, B.V., akademik, red.; ISHLINSKIY, A.Ta., akademik, red.; REMEZ, Ye.Ya., red.; SAVIN, G.M., akademik, red.; SOKOLOV, Yu.D., red.; SMIRNOV, V.I., akademik, red.; YUSHKEVICH, A.P., prof., red.; POGREBYSSKIY, I.B., dotsent, red.; SHTELIK, V.G., red.izd-va; RAKHLINA, N.P., tekhn.red.

[Collected works in three volumes] Polnoe sobranie trudov v trekh tomakh. Kiev, Izd-vo Akad.nauk USSR. Vol.1. 1959. 310 p. (MIRA 12:8)

1. AN USSR (for Shtokalo, Gnedenko, Ishlinskiy, Savin). 2. Chlenkorrespondent AN USSR (for Remez, Sokolov). (Science)

PHASE I BOOK EXPLOITATION

SOV/4905

Shtokalo, Iosif Zakharovich

Lineynyye differentsial'nyye uravneniya s peremennymi koeffitsientami; asimptoticheskiye metody i kriterii ustoychivosti i neustoychivosti resheniy (Linear Differential Equations with Variable Coefficients; Asymptotic Methods and the Stability and Instability Criteria of Solutions) Kiyev, Izd-vo AN UkrSSR, 1960. 78 p. Errata slip inserted. 3,000 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Institut matematiki.

Resp. Ed.: Yu. A. Mitropel'skiy, Corresponding Member, Academy of Sciences UkrSSR. Ed. of Publishing House: I. V. Kisina; Tech. Ed.: R. A. Buniy.

Card 1/7

Linear Differential Equations (Cont.)

SOV/4905

PURPOSE: This book is intended for scientific workers, engineers, aspirants, and students in advanced courses at universities.

COVERAGE: The book presents investigations of linear differential equations with variable coefficients. According to the author, the highly important problem of the stability and instability of solutions of equations with quasi-periodic coefficients is solved in this book. Criteria obtained by him are of great importance for the development of the theory of the equations considered in this book, and for the applications to various mechanical and technical problems. Equations, systems of equations, and the asymptotic character of the approximate solutions of such equations and systems of equations are discussed in detail. Stability and instability criteria of the solutions of the examined systems of equations are also considered. Practical applications of the results obtained are included. N. M. Krylov and N. N. Bogolyubov, authors in related fields of science, are mentioned. There are 82

Gard 2/7

Linear Differential Equations (Cont.) SOV	7/4905
references: 68 Soviet, 6 Italian, 4 French, 2 English, 2 German.	and
TABLE OF CONTENTS	
Introduction	3
Ch. I. Linear Homogeneous Equations of n-th Order With Coefficients Whose Variable Parts Are Formed by Finite Functions, for the Case When Roots of the Corresponding Characteristic Equation Have Negative Real Parts 1. Basic notions and designations 2. Stability of solution of the equation under consideration at t + + **	6 6 7
Ch. II. Linear Homogeneous Equations of n-th Order With Coefficients Whose Variable Parts Form Functions of the ∑ Class, for the Case When Roots of the Corresponding Characteristic Equation Have	
Card 3/7	

GUDYMENKO, F.S. [Hudymenko, F.S.]; SHTOKALO, I.Z., otv.red.

[Russian-Ukrainian mathematical dictionary; 12,000 terms] Rosiis'ko-ukrains'kyi matematychnyi slovnik; 12000 terminiv. Kyiv, Vyd. Akad. nauk URSR, 1960. 162 p.

(MIRA 14:4)

(Russian language -- Dictionaries -- Ukrainian) (Mathematics--Dictionaries)

```
SHTOKALO, I.Z.; PYASKOVSKIY, B.V. [Piaskovs'kyi, B.V.]; RAVIKOVICH, S.D.

[Ravikovych, S.D.]

"Lenin and modern physics" by V.Hott. Raviewed by I.Z.Shtokalo,
B.V.Piaskovs'kyi, S.B.Ravikovych. Dop.AN URSR no.11:1572-1575 *60.

(MIRA 13:11)

(Physics--Philosophy) (Lenin, Vladimir Il'ich, 1870-1924)

(Hott, V.)
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HERE CONTRACTOR AND THE PROPERTY OF THE PROPER

On the calculus of operations [with summary in English]. Ukr.
mat.zhur. 12 no.1:72-78 '60.

(Calculus of operations)

(Calculus of operations)

SHTOKALO, I.Z., adademik; MITROPOL'SKIY, Yu.A.; FIL'CHAKOV, P.F., doktor fizmat. nauk

Mikhail Alekseevich Laverent'ev; on his 60th birthday. Ukr. mat. zhur. 12 no.4:490-491 '60. (MIRA 14:3)

1. AN USSR (for Shtokalo). 2. Chlen-korrespondent AN USSR (for Mitropol'skiy).

(Lavrent'ev, Mikhail Alekseevich, 1900-)

SHTOKALO, Iosif Zakharovich; MITROPOL'SKIY, Yu.A., akad., otv. red.; KISI-NA, I.V., red. izd-va; LISOVETS, A.M., tekhn. red.

[Operational methods and their development in the theory of linear differential equations with variable coefficients] Operatsionnye metody i ikh razvitie v teorii lineinykh differentsial'nykh uravnenii s peremennymi koeffitsientami. Kiev, Izd-vo Akad. nauk USSR, 1961. 127 p. (MIRA 14:11)

1. AN USSR (for Mitropol'skiy).
(Differential equations, Linear) (Calculus of operations)

OSTROGRADSKIY, Mikhail Vasil'yevich, matematik, mekhanik; SHTOKALO, I.Z., akademik, otv. red.; GNEDEN KO, B.V., akademik, zam. otv. red.; TSHLINSKIY, A.Yu., akademik, zam. otv. red.; BOGOLYUBOV, N.N., akademik, red.; REMEZ, Ye.Ya., red.; SAVIN, G.N., akademik, red.; SOKOLOV, Yu.D., red.; SMIRNOV, V.I., akademik, red.; YUSHKEVICH, A.P., prof., red.; POGREBYSSKIY, I.B., dotsent, red.; SHTELIK, V.G., red. izd-va; RAKHLI-NA, N.P., tekhn. red.

[Complete works in three volumes] Polnoe sobranie trudov v trekh to-makh. Kiev, Izd-vo Akad. nauk USSR. Vol.2. 1961. 358 p.

(MIRA 14:11)

1. AN USSR (for Shtokalo, Gnedenko, Ishlinskiy). 2. Chlen-korrespondent AN USSR (for Remez, Sokolov).

(Mechanics, Analytic)

OSTROGRADSKIY, Mikhail Vasil'yevich [deceased]; SHTOKALO, I.Z., akademik, otv.red.; GNEDENKO, B.V., akademik, otv.red.toma; ISHLINSKIY, A.Yu., akademik, zamestitel' otv.red.; BOGOLYUBOV, N.N., akademik, red.; REMEZ, Ye.Ya., otv.red.toma; SAVIN, G.N., akademik, red.; SOKOLOV, Yu.D., red.; SMIRNOV, V.I., akademik, red.; YUSHKEVICH, A.P., prof., red.; POGREBYSSKIY, I.B., dotsent, red.; SHTELIK, V.G., red.izd-va; RAKHLINA, N.P., tekhn.red.

[Complete collection of works in three volumes] Polnoe sobranie trudov v trekh tomakh. Kiev, Izd-vo Akad.nauk USSR. Vol.3. 1961. 395 p. (MIRA 15:2)

1. AN USSR (for Shtokalo, Gnedenko, Savin). 2. Chleny-korrespondenty
AN USSR (for Remez, Sokolov).

(Mathematics)

(Ostrogradskii, Mikhail Vasil'evich, 1801-1861)

BOGOLYUBOV, N.N., red.; GNEDENKO, B.V., red.; POGREHYSSKIY, I.B., red.; REMEZ, Ye.Ya., red.; SMIRNOV, V.I., red.; SOKOLOV, Yu.D., red.; SHIROKOVA, I.Z., red.; YUSHKEVICH, A.P., red.; SHIROKOVA, S.A., red.; YERMAKOVA, Ye.A., tekhn. red.

[Pedagogical heritage and documents on the life and work of Mikhail Vasil'evich Ostrogradskii (1.1.1862 - 1.1.1962)]Mikhail Vasil'evich Ostrogradskii, l ianvaria 1862 - 1 ianvaria 1962; pedagogicheskoe nasledie, dokumenty o zhizni i deiatel'nosti. Pod red.I.B.Pogre-bysskogo i A.P.IUshkevicha. Moskva, Gos.izd-vo fiziko-matem.lit-ry, 1961. 397 p. (MIRA 15:1)

1. Akademiya nauk SSSR. Institut matematiki. (Ostrogradskii, Mikhail Vasil'evich, 1801-1861)

SHTOKALO, I.Z.

THE THE PERSON OF THE PERSON O

"Development of mechanics in the Ukraine during Soviet rule"
by G.M.Savin [Savia, H.M.], V.V.Georgievs kaia [Heorhiievs ka, V.V.].
Reviewed by I.Z.Shtokalo. Prykl.mekh. 8 no.2:227 162.

(MIRA 15:3)

(Ukraine-Mechanics) (Savin, G.M.) (Georgievs kaia, V.V.)

BOGOLYUBOV, Aleksey Nikolayevich; SHTOKALO, I.Z., akademik, ctv. red.; ORLIK, Ye.L., red.

[History of mechanical engineering] Istoriia mekreniki mashin. Kiev, Naukovadumka, 1964. 460 p. (MIF: 17:12)

1. Akademiya nauk Ukr.SSR (for Shtokalo).

SHTOKALO, I.Z., akademik, red.; BOGOLYUROV, N.N., akademik, red.; GLUSHKOV, V.M., akademik, red.; AKHIYEZER. A.I., akademik, red.; PAMASYUK, O.S., akademik, red.; KOPNIN, F.V., doktor filosofskikh nauk, red.; VIL'NITSKIY, M.B., kand. fil. nauk, red.; DYSHLEVYY, P.S., kand. fil. nauk, red.; KUCHER, V.I., red.

[Philosophical questions of modern physics; materials] Filosofskie voprosy sovremennoi fiziki; materialy. Kiev, Naukova dumka, 1964. 325 p. (MIRA 17:10)

1. Respublikanskoye soveshchaniye po filosofakim veprosam fiziki elementarnykh chaptits i poley. Kiev, 1962. 2. Vitseprezident AM Ukr.SSR (for Glushkov). 3. Ukrainskiy fizikotekhnicheskiy institut (for Akhiyezer). 4. Institut matematiki AM Ukr.SSR (for Parasyuk). 5. Institut filosofii AM Ukr.SSR (for Dyshlevyy, Kopnin).

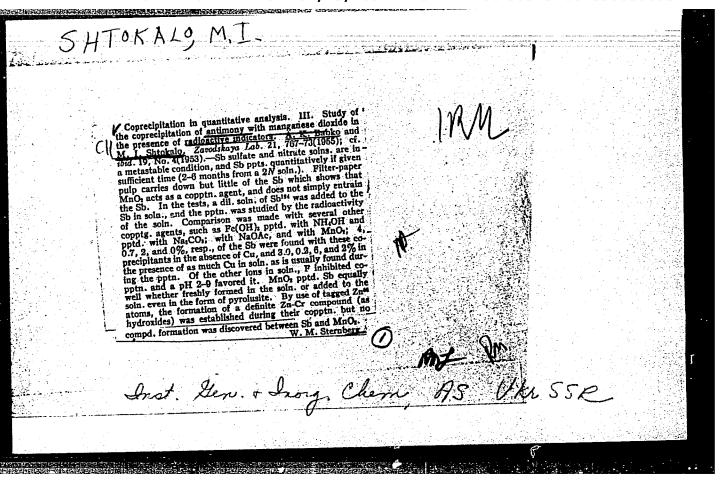
SHTOKALO, I.Z.; KALUZHNIN, L.A.; BLAGOVESHCHENSKIY, Yu.V.; BOGOLYUBOV, A.N.

Vladimir Petrovich Vel'min, 1885-; on his 80th birthday.

Ukt. mat. zhur. 17 no.5:137-138 '65.

(MIRA 18:12)

的大学的现在分词,我们也是我们的对于我们的,我们就是我们的一个人,我们就是我们的一个人,我们也不是是一个人。



SHTOKALO, M.I., Cand Chem Sci 22 — (diss) "Study of certain processes of co-precipitation in quantitative analysis." Kiev, 1958, 16 pp with illustrations (Acad Sci UkSSR. Inst of SHERKE General and Inorganic Chemistry) 150 copies (KL, 39-58, 107)

- 13 -

京京学校开始的政策的保护区域,这种特殊的企业的企业和企业和企业和企业,所以企业的企业和企业的企业的企业,但可以可能是企业的企业和企业的企业的企业的企业。 1985年

AUTHORS:

Babko, A.K., Shtokalo, M.I.

32-24-6-4/44

TITLE:

Co-Precipitation in Quantitative Analysis (Soosazhdeniye v kolichestvennom analize). Communication V (Soobshcheniye V). The Influence Exercised by Complexon Upon the Precipitation of Zirconium Phosphate (Vliyaniye kompleksona na osazhdeniye

fosfata tsirkoniya)

PERIODICAL:

Zavodskaya Laboratoriya, 1958, Vol 24, Nr 6, pp 674-677 (USSR)

ABSTRACT:

"Hidden precipitants" are frequently used for the separation of numerous elements, because the forming of crystals is retarded by a formation in stages of the precipitation anions, so that, as e.g., in the presence of pyridine, denser sulfide precipitations are obtained. In the present paper the influence exercised by ethylene-diamino-tetraacetic acid upon some processes of precipitation is investigated, because a sharp modification of the form of precipitation as well as a decrease of co-precipitation was observed.

Data concerning the separation of zirconium and titanium by means of the phosphate method are given. Zirconium was transferred before precipitation with trilon in a weakly acid medium into a complex, and after precipitation it was found that the precipitation

Card 1/2

Co-Precipitation in Quantitative Analysis. Communication V, The Influence Exercised by Complexon Upon the Precipitation of Zirconium Phosphate

32-24-6-4/44

obtained was much more dense and more easily filtratable than that to which no trilon was added, and also electronmicroscopic photos showed a difference. The observation made to the effect that precipitation comes to a standstill if acidity increases is explained by the presence of two forms of ions, viz., of zirconyl ZrO+2 and zirconium Zx+4. From the method of operation described it follows that for the quantitative precipitation of zirconium phosphate from the trilon complex acidification of up to 3-4 n must be carried out. The experimental separation of zirconium and titanium showed that, in the presence of trilon the co-precipitation of titanium is decreased by more than ten times its amount if trilon is present in the case of phosphate precipitation, whereas, if triethylphosphate is used as a "hidden precipitant" no positive results were obtained, which is explained by the decomposition of hydrogen peroxide after long boiling. There are 1 figure, 1 table, and 5 references, 3 of which are Soviet.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii Akademii nauk USSR (Institute of General and Anorganic Chemistry, AS Ukrainian SSR) .

Card 2/2

1. Zirconium phosphate--Precipitation 2. Zirconium---Separation

3. Titanium-Separation 4. Ethylenediamino tetracetic acids--Chemical

effects

。 1990年1月1日 - 1990年 - 1990年1月1日 - 1990年1月1日 - 1990年1月1日 - 1990年1月1日 - 1990年1日 - 1990年1日 - 1990年1日 - 1990年1日 - 19

5(2)

SOV/21-59-7-16/25

AUTHOR:

Babko, A.V., Member of the AS UkrSSR and Shtokalo, M.I.

TITLE:

Coprecipitation of Fe3+ and MnO4 Ions with Slightly

Soluble Sulfates

PERIODICAL:

Dopovidi Akademii Nauk Ukrains'koi RSP, 1959, Nr 7, pp 766-768 (UkrSSP)

ABSTRACT:

The authors studied the coprecipitation of permanganate and iron with precipitates of barium, lead, strontium, and calcium sulfates. It is shown that the coprecipitation of permanganate decreases slightly from barium to lead and strontium, and sharply decreases when passing on to CaSO₄. A comparison of the degree of coprecipitation of permanganate with the parameters of the crystal lattices of these sulfates confirms the fact that the coprecipitation of KMnO₄ is mainly due to the formation of solid solutions. The coprecipitation of iron is of different character (inner adsorption) and is linked rather with the form of the crystals. There are 2 tables and 3

Card 1/2

507/21-59-7-16/25

Coprecipitation of Fe^{3+} and MnO_4^- Ions with Slightly Soluble Sulfates

references, 1 of which is Soviet and 2 German

ASSOCIATION: Instytut zahal'noy ta neorhanichnoyi khimiyi AM URSR (Institute of General and Inorganic Chemistry AS

UkrSSR)

SUBMITTED: April 7, 1959

Card 2/2

5(2) AUTHORS:

Babko, A. K., Shtekalo, M. I.

SOV/32-25-7-2/50

TITLE:

Co-presipitation in Quantitative Analysis (Scosezhdeniye v kolichestvennom aralize). Investigation of Crystal Growth of Barium Sulfate (Izucheniye rosta kristallov sernokislogo

bariya)

PERIODICAL:

Zavodskaya laborateriya, 1959, Vel 25, Nr 7, pp 779-762 (USSR)

ABSTRACT:

In spite of investigations hitherto carried out on crystallization of barrium sulfate (I) the problem is not solved whether the growth process takes place in an agglomeration of cross-shaped particles, an enlargement of "snow flakes" while retaining the shape or by an aggregate of the small particles. In the present case various crystallization stages of (I) were investigated by the aid of an electron microscope thus employing a different preparation technique. It was found that two kinds of crystal growth of the primary (I) crystals exist; the first variation

occurs by the continuation of the reaction of

and So. , whereas

aging causes completely different

alterations. In both cases larger crystals with a regular

Card 1/2

Co-precipitation in Quantitative Analysis. Investigation of Crystal Growth of Barium Sulfate SOV/32-25-7-2/50

shape are formed, in the case of aging, however, it takes place by decomposition of the sharp edges of individual pross-shaped double crystals. Some microphotographs of crystals are given (Figs 1-5). In order to determine the connection between the shape of particles of the solid phase and its absorptive power, co-precipitations of (I) with KCl and KMnO, were carried out.

It was found that in both mases oc-precipitation is considerably higher if crystals are formed with a ramified surface. There are 5 figures and 7 references, 3 of which are Soviet.

ASSOCIATION: Institut obshohey i neorganicheskoy khimii Akademii nauk USSR (Institute for General and Inorganic Chemistry of the Academy of Sciences of the UkrSSR)

Card 2/2

BABKO, A.K. akademik; SHTOKALO, M.I. Reaction of niobium with xylenol orange. Dop. AN URSR no.9:1179-(MIRA 14:11)

- 1. Institut obshchey i neorganicheskoy khimii AN USSR.
- 2. AN USSR (for Babko). (Niobium) (Xylenol)

THE REPORT OF THE PROPERTY OF

1182 '61.

BABKO, A.K.; SHTOKALO, M.I.

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Study of the complexing and relative stability of certain zirconium complexes by use of the metal-indicator method. Ukr.khim.zhur. 27 no.5:566-574 '61. (MIRA 14:9)

1. Institut obshchey i neorganicheskoy khimii AN USSR. (Zirconium compounds)

s/075/62/017/009/002/006 E071/E436

AUTHORS:

Babko, A.K., Shtokalo, M.I.

TITLE:

Photometric determination of niobium by means of

PERIODICAL: Zhurnal analiticheskoy khimii, v.17, no.9, 1962,

When studying the action of metallochromate indicators on salts of highly covalent metals, the authors noticed that xylenol orange ([3:3'-bis N:N-di-(carboxymethyl)-aminomethyl]-ocresolsulphonaphthalein), further designated XO, in an acid medium gives a weak reaction with niobium. Oxalic acid, tartaric acid and other similar substances intensify the ability of niobium to react with xylenol orange forming intensely coloured (red) On the above basis the authors developed a photometric method of determining niobium in the presence of The composition of niobium xylenol orange complex was determined by the method of The molar extinction coefficient of isomolar series as Nb(X0)2. Card 1/2

BABKO, A. K.; SHTOKALO, M. I.

Application of the method of isomolar series and the methon of equilibrium displacement using metal indicators for determining the composition of complexes. Ukr. khim. zhur. 28 no.3:293-301 162. (MIRA 15:10)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

(Complex compounds)

SHTOKALO, M. I.

Study of some titanium complexes by the metal indicator method. Ukr. khim. shur. 28 no.5:555-561 '62. (MIRA 15:10)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

(Titanium compounds)

BABKO, A.K.; SHTOKALO, M.I.

Complex formation in the zirconium - diantipyrylmethane, system.

Zhur.neorg.khim. 8 no.5:10(8-1092 My '63. (MIRA 16:5)

(Zirconium compounds)

BABKO, A.K.; SHTOKALO, M.I.

也是是我的的话,我们们就是我们的人,我们就是我们的人,我们就是我们的人,我们就是我们的人,我们也会会会一个一个人,我们也不是不是一个人,我们就是我们的人,我们就

Determination of the relative stability of certain niobium complexes by the metal-indicator method. Ukr. khim. zhur. 29 no.10:1079-1082 163. (MIRA 17:1)

l. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

BABKO, A.K., akademik; SHTOKALO, M.1.

Formation of the ternary complex in the system iron - xylenol orange - fluoride. Dop. AN URSR no.8:1077-1080 '64. (MIRA 17:8)

- 1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
- 2. AN UkrSSR (for Babko).

ACCESSION NR: AP4021983

s/0073/64/030/002/0220/0223

AUTHOR: Babko, A. K.; Shtokalo, M. I.

TITLE: Investigation of reagents for the colorimetric determination of tantalum

SOURCE: Ukrainskiy khimicheskiy zhurmal, v. 30, no. 2, 1964, 220-223

TOPIC TAGS: tantalum, niobium, titanium, colorimetric analysis, color reagent, hematoxylin, pyrocatechol violet, phenylfluorin, arsenazo I, eriochromcyanin, acid chrome blue, morin, colorimetric determination, reagent specificity

ABSTRACT: A group of color reagents found earlier (Ukr, khim. zh 29, 963 (1963)) to be suitable for identifying tantalum according to their spectrophotometric characteristics are now further investigated to determine their specificity for Ta and Nb, and to determine the optimum pH. The color intensity of Ta, Nb, and Ti complexes with hematoxylin (I), pyrocatechol violet (II), phenylfluorin (III), arsenazo I (IV), eriochromcyanin (V), acid chrome blue (VI) and morin (VII) at pH 0-5, and of I, IV and VII in 5-10 NHCl solutions was determined, Hematoxylin, pyrocatechol violet and morin are the most valuable reagents for determining Ta and Nb in the presence of Ti. Hematoxylin and morin may be used to

Card 1/2

ACCESSION NR: AP4021983

determine total Ta and Nb. Additional work with pyrocatechol violet (PKV) shows that it may be used for the colorimetric determination of Ta in the presence of Nb. In the presence of ethylenediaminetetraacetic acid its coloration is intensified, distinguishing Ta from Nb; the optimum density of the Ta-PKV complex follows Beer's law in a wide concentration range. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii Akademii nauk UkrSSR (Institute of General and Inorganic Chemistry, Academy of Sciences, UkrSSR)

SUEMITTED: 06May63

DATE ACQ: 09Apr64

ENCL: 00

SUB CODE: CH

NO REF SOV: 003

OTHER: 000

Card 2/2

DARRO, A.A.; Callerra, F.I.

Study of the relative stability of some tantalut complexes
by means of the metal indicator mathod. Thr. whim. share 30
an. 91972-990 Thr.

1. mailton charactery integral cheshry matrix of the 35th.